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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/590,605

08/24/2006

Yuji Kurokawa

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23373 7590 09/11/2008
SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER

TRUONG, BAO Q

ART UNIT

PAPER NUMBER

2875

MAIL DATE

DELIVERY MODE

09/11/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/590,605 | Applicant(s) KUROKAWA ET AL. | |
| | Examiner BAO Q. TRUONG | Art Unit 2875 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5-9 and 15-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 23 and 24 is/are allowed.
- 6) ☒ Claim(s) 1,2,5-9,15-18,20 and 21 is/are rejected.
- 7) ☒ Claim(s) 19 and 22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 November 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/20/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Blieske et al. [US 7,368,655 B2].

Regarding claim 1, Blieske et al. discloses a light diffusing sheet comprising a light-transmitting resin, having a light emission side which is one surface and a light entrance side which is another surface, characterized by having fine recesses formed in the light emission side which is one surface, the fine recesses having a shape which is any of the shape of an inverted polyangular pyramid, the shape of an inverted truncated polyangular pyramid, the shape of an inverted cone, and the shape of an inverted truncated cone (figures 3 and 4, whole document) .

4. Claims 1, 5, 6, 15, 16 and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Ko et al. [US 7,320,538 B2].

Regarding claim 1, Ko et al. discloses a light diffusing sheet comprising a light-transmitting resin, having a light emission side which is one surface and a light entrance side which is another surface, characterized by having fine recesses formed in the light emission side which is one surface, the fine recesses having a shape which is any of the shape of an inverted polyangular pyramid, the shape of an inverted truncated polyangular pyramid, the shape of an inverted cone, and the shape of an inverted truncated cone (figures 1, 2, 4-7, whole document).

Regarding claim 5, Ko et al. discloses the recesses have been regularly arranged (figures 4-7).

Regarding claim 6, Ko et al. discloses the bevel between the surface having fine recesses formed and each inclined face of each fine recess having the shape of an inverted polyangular pyramid or inverted truncated polyangular pyramid, or the bevel between that surface and the ridgeline of each fine recess having the shape of an inverted cone or inverted truncated cone is 15-70 degree (figures 6-7, column 7 lines 24-25).

Regarding claim 15, Ko et al. discloses a light diffusing sheet comprising a light-transmitting resin, having a light emission side which is one surface and a light entrance side which is another surface, characterized by having fine recesses formed in the light emission side which is one surface, the fine recesses having a shape which is any of

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the shape of an inverted polyangular pyramid, the shape of an inverted truncated polyangular pyramid, the shape of an inverted cone, and the shape of an inverted truncated cone, wherein the fine recesses have been formed in an oblique-line arrangement, the bevel between the surface having fine recesses formed and each inclined face of each fine recess having the shape of an inverted polyangular pyramid or inverted truncated polyangular pyramid, or the bevel between that surface and the ridgeline of each fine recess having the shape of an inverted cone or inverted truncated cone is 35-70 degree; and the proportion of the area occupied by the fine recesses in the surface having the fine recesses formed is 30-100% (figures 1, 2, 4-7, whole document) .

Regarding claim 16, Ko et al. discloses a core layer [12d, 12e] made of a light-transmitting resin and laminated to the surface on the side opposite to the surface having fine recesses formed (figures 5).

Regarding claim 18, Ko et al. discloses a functional layer [28] having light-transmitting properties has been laminated to the surface on the side opposite to the surface having fine recesses formed, and the functional layer having light-transmitting properties comprises an ultraviolet-absorbing layer and/or an antistatic layer (figures 1-5).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2, 7, 8, 9, 17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ko et al. in view of Takeuchi et al. [US 5,944,405].

Regarding claims 2 and 17, Ko et al. discloses a light diffusing sheet but does not disclose the light diffusing agent.

Takeuchi et al. discloses the light diffusing agent (figures 1-3, column 1 lines 42-50).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the sheet of Ko et al. with the diffusing agents as taught by Takeuchi et al. for purpose of providing an advantageous way of increasing diffused light as design.

Regarding claim 7, Ko et al. discloses the bevel between the surface having fine recesses formed and each inclined face of each fine recess having the shape of an inverted polyangular pyramid or inverted truncated polyangular pyramid, or the bevel between that surface and the ridgeline of each fine recess having the shape of an inverted cone or inverted truncated cone is 35-70 degree (figures 6-7, column 7 lines 24-25).

Regarding claim 8, Ko et al. discloses the proportion of the area occupied by the fine recesses in the surface having the fine recesses formed is 30-100% (figures 4-5)

Regarding claim 9, Ko et al. discloses the fine recesses have been formed in an oblique-line arrangement (figures 4-5).

Regarding claim 20, Ko et al. discloses a backlight unit characterized by including the light diffusing sheet which has a thickness and has been disposed in front of a light source, wherein a functional layer [28] having light-transmitting properties has been laminated to the surface on the side opposite to the surface having fine recesses formed, and the functional layer having light-transmitting properties comprises an ultraviolet-absorbing layer and/or an antistatic layer (figures 1-5). However, Ko et al. does not clearly disclose the thickness of 0.3-5 mm. Since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955). It would have been obvious to a person of ordinary skill in the art at the time the invention was made because this is considered to be change in size.

7. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ko et al. [US 7,320,538 B2].

Regarding claim 21, Ko et al. discloses a light diffusing sheet which has a thickness (figures 1-5). However, Ko et al. does not clearly disclose the thickness of 0.3-5 mm. Since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955). It would have been

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obvious to a person of ordinary skill in the art at the time the invention was made because this is considered to be change in size.

Allowable Subject Matter

8. Claims 19 and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Claims 19 and 22 recites the surface on the side opposite to the surface having fine recesses formed has recesses and protrusions which are finer than the fine recesses, which are not disclosed or suggested by the prior of record.

9. Claims 23-24 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Claim 23 recites, in combination, the surface on the side opposite to the surface having fine recesses formed has recesses and protrusions which are finer than the fine recesses, which are not disclosed or suggested by the prior of record.

Claim 24 is dependent on claim 23.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BAO Q. TRUONG whose telephone number is (571)272-2383. The examiner can normally be reached on Monday-Friday (8:00 AM - 4:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra L. O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Bao Q. Truong/
Primary Examiner
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